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25
24

A Dissertation
ON
THE SCLEROCELE
OF THE
PROSTATE GLAND,
WITH
AN INQUIRY INTO THE CAUSE OF THIS DISEASE,
AND ALSO,
WHY THIS AFFECTION OCCURS MORE PARTICULARLY IN OLD
AND SEDENTARY MEN.
SUBMITTED TO THE PUBLIC EXAMINATION OF THE PROFESSORS
OF THE COLLEGÉ OF PHYSICIANS AND SURGEONS IN THE
UNIVERSITY OF THE STATE OF NEW-YORK.
SAMUEL BARD, M. D. PRESIDENT.
FOR THE DEGREE OF
DOCTOR OF PHYSIC,
ON THE 7th DAY OF MAY, 1816.
BY ROBERT M. SULLIVAN, *TYRO.*

“ In all the extent of Anatomy, there is not a more important subject for the attention of the Surgeon than this of the size, relation and connection, and diseases (with their effects) of the prostate gland.” C. BELL.

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1816.

TO
WRIGHT POST, M. D.

PROFESSOR OF ANATOMY AND SURGERY
IN THE COLLEGE OF PHYSICIANS AND SURGEONS
OF THE UNIVERSITY

OF THE STATE OF NEW-YORK,
THIS DISSERTATION

IS RESPECTFULLY DEDICATED,

AS A TESTIMONY OF ESTEEM

FROM HIS PUPIL,

ROBERT M. SULLIVAN.

TO

JOHN K. RODGERS,

THIS DISSERTATION IS ALSO ADDRESSED,

FOR THE MANY FAVOURS RECEIVED ;

AND AS A

TRIBUTE OF GRATITUDE

FOR PRIVATE FRIENDSHIP,

BY ROBERT M. SULLIVAN.

INTRODUCTION.



ACCIDENT determined my choice of the subject of the Prostate Gland for an inaugural dissertation. The idea of a *cause* for the enlargement of the prostate, and of a plausible treatment, advanced before the American Æsculapian society, receiving the sanction of an enlightened President, urged me to attempt the execution of what I had then merely thought of : and influenced by this consideration, I found myself engaged in a task, the difficulty of which, and the want of materials to perform it, I was not then aware of. I examined all that was to be found in periodical works and others, and finding the diseases of the Prostate Gland had had but little attention paid them, and that the terms made use of to designate them, tended only to confuse, and to cause practitioners to neglect them from their formidableness, I concluded I could not do better than to continue in my first resolution, and if I could not succeed, that I might be profitably employed in collecting into one view, what had been scattered through so many publications, and endeavour to cast a little more light upon a subject apparently so intricate.

I have also endeavoured to point out why, and in what manner this disease does occur in old and sedentary men. I have done this the more readily, because many circumstances of their lives have an agency in producing that condition, which I have ventured to assign as the cause of the enlargement of the Prostate Gland in advanced age, and more particularly in literary persons who lead a life of seclusion. This disease occurring oftener in such persons than in others, should of itself be an incentive to exertion on our part to find out some alleviation for those, who have toiled and earned their complaint, as we might say, in our *service*.

M. Tissot observes, “ Il y’a long-temps qu’on à remarqué que l’étude des sciences étoit peu favourable à la santé du corps.” Why such a life affects the general health of the body to which the author here alludes, is evident enough: but how the Prostate should become affected by it, may perhaps, at first view, not be altogether so clear. Yet I trust we shall see, that the Prostate Gland may be affected by “ l’étude des sciences” as well as the body in general.

It is much to be regretted that these men, with their great strength of mind, are so very blind to the welfare of their body, for “ On est trop savant quand on l’est au depens de sa santé ;” unless they are closeted they are unhappy, they become misanthropes, avoid that society in which were they to indulge, they would be the fitter afterwards

for greater mental exertion, and they might be enabled to continue their labours longer, for the benefit of those around them, and to their own greater comfort. For to adopt the language of M. Tissot, à quoi sert la science sans le bonheur ?

On the subject of the enlargement to which the Prostate Gland is liable, there never was any separate treatise written before that of Mr. Home, which has not yet general circulation in this country. Whatever else is written concerning it, is scattered through the various periodical publications, in the form of cases, from which we learn nothing but the symptoms of a retention of urine, and the dreadful certainty, that nothing had been done for the patient. To some of these cases the detail of a dissection is given, the parts cut through enumerated ; and as to the state, appearance, texture, size, and condition of the gland, and the state of that part of the urethra connected with it, not one word is said. We are told what we knew, *by the examination per anum*, before the body was opened, that the Prostate Gland was enlarged. It is to such vague methods of procedure, that we are to attribute the little knowledge we possess of the precise state of the parts affected.

The general appellation of these cases is, enlargement of the Prostate Gland. Some, however, by way of diagnostic, called it a *Schirrus* ; and with this attempt they also have remained satisfied,

which has become the cause of others neglecting them in the same shameful manner: for, if it be schirrus, say they, there is nothing to be done, it is incurable, the patient must die. "Perhaps our curiosity has been checked by a recollection of the ability already displayed, and the acknowledged superiority of investigation, already devoted to the morbid history of this gland." Such is the language of Mr. Ramsden, in speaking of several morbid enlargements, to which the testicles are subjected. Of the morbid state to which the Prostate Gland is subject, we have not so much to say. Perhaps, then, it is from the testicles being considered a more important organ, that they have received so much more investigation than the Prostate Gland: but to consider a disease, merely because it is situated in a part important in itself, without having reference to its effects upon the constitution or life of a being, is certainly an incorrect method of proceeding. Hence, although the Prostate Gland does not stand so high in the estimation of the individual, as his *testicles*, the consequences resulting from the disease of the former, are by far more troublesome and dangerous than those which can, in any way arise from the most inveterate disease to which the latter are subject. Nay, the consequences of an enlarged Prostate Gland, are even such as to hurry the patient into an untimely grave, with

the most exquisite anguish attending it. Besides, the patient in the case of an enlarged Prostate, is denied from its situation the advantages known to result from local applications, which are easily made to the testicles, and if these fail of success, and if the disease assumes a character which neither local nor general means can subdue, the patient has always left the resource of extirpation. Not so of the Prostate Gland, situated internally, and surrounded by parts of high consequence to the animal economy, which, as it enlarges, it excites to such a degree, that sooner or later, an excruciating death must ensue from the secondary affections of these organs.

What the causes of the enlargement of the Prostate Gland are, and with what species of disease it is affected, little has been said more than mere conjecture, and that not very plausible.

Among the causes have been enumerated psora, tetters, venereal virus, &c. But the grand one of all is scrofula, which has been assigned, forsooth, because the diseased part is a gland, and this as a cause, has been set down by those, who do not believe that that disease ever affects the body after the twenty-fifth year: with such causes, and the incurable nature of scrofula, they have been pleased to rank an enlarged state of the Prostate Gland, with the *opprobria medicorum*: all that has been done in the way of treat-

ment, has been performed without any reference to causes, for the palliation of symptoms present, and the prevention of more serious ones.

“ Causes are,” it is true, “ for the most part obscure :” but surely when so important a part is concerned as the Prostate Gland, we ought to make some endeavours towards their discovery. Let us work from supposition, from hypothesis, from analogy, or from theory : where we cannot succeed from the two soundest, viz. analogy and theory, let us have recourse to the others : open the path, and perhaps it will be followed more assiduously, and may lead to some important facts which will tend to the alleviation, if not to the cure, of a hitherto fatal affection.

It is believed we have attempted this work from theory, and from analogy, but one less interested, and considering every thing impartially, might say, it is mere Hypothesis : for says Tristram Shandy, “ It is the nature of an *Hypothesis*, when once a “ man has conceived it, that it assimilate every thing “ to itself as proper nourishment, and from the first “ moment of your begetting it, it grows the stronger, “ by every thing you see, hear, read, and under- “ stand.” This is an observation which every man who pretends to write upon the treatment of a disease, the theory of which he himself has formed, should keep in mind, and be able to see distinctly every side of the question. It does in some degree

apply to the present performance. I have assimilated to it not what I have seen, for that is nought ; but what I have read, heard and understood ; how far I have done this fairly, I shall leave for others to determine.

The French journalists have certainly the credit of having done more in the way of investigation of this important affection than their boastful neighbours. To M. Dessault, particularly, we are indebted, for at all events, he has found out the method of curing, although he has apparently not troubled himself much concerning the cause, of this disease.

But the English, priding themselves upon their superior surgery, pretend to reject every thing that is any way of French origin, although they frequently acknowledge them their masters in medical surgery, by their numerous plagiarisms: how M. Dessault, has escaped them this time, is a little surprising.

It proves, however, the advantages American surgeons possess. For by their impartiality, they reap the fruit of the labours of both.

The opinion advanced in this thesis, concerning the cause of this morbid enlargement, and of its occurring, for the most part, in old and sedentary men, although not altogether new in regard to another affection, with which analogy suggested the idea, is so, as far as I am aware, in its appli-

cation to the disease, to which at this advanced time of life, the prostate gland is more particularly subject.

It is also advanced, that the diseases to which the prostate gland has been supposed for so long a time subject, arise from this sole cause, and that it is, instead of schirrus, varicose enlargement, scrophula, &c. affected but with one species of enlargement, and to which disease, the term *Sclerocèle* of the Prostate Gland (as indicating its true state of hardness) may be applied with the same correctness, that it has lately been to a *similar affection* (as will be shown) of the testicle, by that accurate observer Mr. Ramsden.

Upon what data I have been led to found these opinions, I shall, in the following pages endeavour to show.

A DISSERTATION
ON THE
SCLEROCELE
OF THE
PROSTATE GLAND, &c.



THE first effects of confinement, and want of exercise, show themselves in a plethora of the blood-vessels. When this confinement is accompanied with hard study, and intense thought, this plethora, or fulness, shows itself in the brain, in consequence of the excitement this organ undergoes, thereby determining a greater flow of blood to it, at the expense of the lower parts of the body: from which circumstances, they being deprived of their necessary quantity of blood for the due execution of the *natural functions*, these are imperfectly performed; the secretions are diminished, while the absorption is going on as usual; hence arises a languid state of the bowels—"Le cerveau qui est," to use the language of M. Tissot,^a "le theatre de la guerre, les nerfs qui en tirent leur origine, et l'estomac qui a beaucoup de nerfs tres sensibles, sont les parties qui en souffrent ordinairement le plutot, *et le plus du travail excessif* de l'esprit: mais il n'y en a presque

^a Traité de la santé des Gens de lettres p. 21.

aucune qui ne s'en ressent si la cause continue long-temps à agir." Then, as the author observes, the cause is continued for a longer time: a siccity, if I may be allowed the expression, of the bowels ensues; digestion is but partially performed, the materials taken in become acrid, and what passes off is of a foul irritating quality. For "the man who thinks the most digests the worst, *ceteris paribus*; and he who thinks the least, with him digestion is more easily and completely performed."

The parts which suffer most, are those in which the vessels naturally weak, stand most in need of help to keep up the activity of the circulation through them, such as the organs contained in the abdomen; the action of respiration, when it is strong presses during inspiration, all the viscera of the abdomen, and thus facilitates the circulation through them: but this action of respiration in sedentary men, being much diminished from what it is naturally, in consequence of want of exercise of the body, which excites this function powerfully; the intestines from the want of this accustomed stimulus, fall into a state of constipation, collections are formed in the lower portion of the canal, which by their long residence become acrid, irritating the vessels of that part, and those in its vicinity, and by the pressure which they make upon the hemorrhoidal veins, preventing the return of blood in them, occasion piles, a most troublesome and painful affection, to which, according to common observation, men of a sedentary and studious life are more particularly subject.

The very attitude of these persons becomes a cause of this disease. “Le pli que les vaisseaux souffrent au haut de la cuisse et sous les genoux dans un homme assis (for they are few who study otherwise than *assis*,) “gênent la circulation dans les parties inferieures, qui à la longue en souffre nécessairement : La courbure du corps gêne les viscères du bas ventre, leur fonctions sont troublées, les digestions éprouvent une nouvelle cause de dérangement ; le sang qui a de la peine à remonter dans les veines du bas ventre s’accumule dans celles du fondement où il est déterminé par son propre poids et où il trouve moins de résistance ; de là vient que les savants sont si souvent tourmentés par les hémorrhoides.” &c.^b

From such a disordered state of the bowels, which at first was caused by the great exertion of the mind, and which now preponderates, the mind and whole nervous system become affected ; they become hypochondriacs and misanthropes, avoid all company, and seclude themselves from the world, thus aggravating all their complaints by their still more sedentary life. As an example of this affection of the mind, we may adduce the instance of Pierre Jurieu, so celebrated for his theological discussions, who became so much affected in this way, that he attributed his frequent and violent colicks to the presence of seven knights, who were imprisoned in his bowels, and were there settling their disputes by the sword.”

^b Tissot de la santé de gens de Lettrés.

The Rectum lies in contact with the prostate gland, and membranous portion of the urethra. When the former becomes in any way diseased, the latter most generally becomes secondarily affected, becoming exceedingly irritable; so much so as to lay the foundation of a *permanent stricture*^c, and which may be entirely removed by the use of the bougie, *never more to return, without the same cause being previously established*. A spasmodic stricture is sometimes occasioned by a lesser degree of irritation, as costiveness, the removal of which will allay the spasm.^d

That piles and other tumours in the rectum, to which we have shewn that old and sedentary men were particularly obnoxious, will occasion irritation in the urethra, may be inferred from the fact mentioned by M. Valentin^e: That those persons who are affected by goître are more particularly subjected to attacks of the croup, the irritation which this tumour occasions in the trachea, predisposing such persons to the influence of this disease, more than others.

Besides this secondary affection of the urethra in old and sedentary men, there are many circumstances existing in them, which go to produce this irritation directly. To commence with every day's observance; that these men are particularly liable to calculous complaints, which no doubt are occasioned by the causes already mentioned,

^c Luxmore on the Urethra.

^d Weldon, obs. &c.

^e Recherches sur le croup.

namely, the great derivation of blood from the lower parts of the body, in consequence of which, the urine passes off loaded with a greater proportion of salts; whereas, in those where a regular circulation exists, they are attenuated by the greater quantity of urine which is secreted. Not only is the urine more acrid in old people than in youth, but the secretions in general are more or less so. M. Tissot observes, "*Leur acrimonie mine par degré le corps,*" and Dr. Rush, in corroboration of this says, that the first sign of old age is a more frequent call to evacuate the bladder.^f From what can this arise, unless it be from the acrid urine irritating that naturally (but which at this time of life is rendered still more so) irritable part, the neck of the bladder, and membranous portion of the urethra? It may be said to be caused by the stimulus of the urine upon the coats of the bladder. But it is well known that the bladder itself in old age loses much of its natural sensibility. That those men who have led a temperate life, and have always been attentive to the exercise of the body, in whom we may conclude there can exist but a very trifling degree of irritation, if any, in the urinary organs, except they be very much advanced in age, will frequently retain their urine for a great length of time; and the bladder itself so insensible as to become completely distended in all points; and they are admonished of the necessity of evacuation, only by the urine dropping from the end of the penis. Not so in him, who leading a sedentary life conjoined with old age; his vessels are full, his excretions acrid,

^f Rush's Inquiries.

he is subject to piles and other diseases of the rectum, to which the other has lived a stranger, has a degree of irritation established in that part of the urethra adjoining the seat of these diseases, which goes on increasing, and becomes so extremely irritable at last, that the smallest quantity of urine stimulates it to such a degree as to give him the sensation of the necessity to evacuate it. To this may be added the bad practice, that men deeply engaged in study, are accustomed to defer evacuation as long as possible: unwilling to interrupt their train of thought; an accumulation of this acrid material takes place, and irritates the neck of the bladder, which induces a temporary spasm in the membranous portion; "and the action of the bladder and abdominal muscles, pressing the urine against the diseased part, keeps up a constant irritation, which renders the disease more obstinate."

This portion of the urethra is the most debilitated part of the canal, from the greater action it has been accustomed to perform; for in it terminate the ducts of the testicles and those of the Prostate Gland, which are naturally excited every time there is an emission of semen. Again, it is a well known fact, that men advanced in age, and those younger who have led debauched lives, lose the power of emission, and frequently that of the erection of the penis, from the end of which the fluid of the prostate excrens.

Men at this age, and particularly those who lead sedentary lives, have always great calculous deposits (as before observed) from their urine: frequently completely formed stones, as in the disease termed the gravel, are passed; but

although they may not be actually troubled with this form of disease, yet matter of a sabulous nature frequently exists, and it is impossible for this to pass through the urethra without irritating it, more particularly that most delicate and naturally very sensible part, which lies between the bulb of the urethra and the neck of the bladder, a part of which passes through the Prostate Gland.

In an old man, the slightest excess in wine, or even exposure to cold or wet feet, will sometimes cause a spasm of the urethra, followed by a complete retention of urine, which undoubtedly must imply a state of canal, far from natural: should he retain his urine much beyond the time he is admonished of the necessity of evacuation, he will, most likely, experience very great difficulty in passing it, and frequently all his efforts of straining are fruitless, he is unable to perform this duty, until relieved by opiates, the warm bath, and such other means as are employed to allay spasm, to the presence of which, at the neck of the bladder, is to be attributed the difficulty he experiences, and not to paralysis from overdistention: for, in such cases, recourse must be had to the catheter immediately, not once only, but perhaps for several days, to prevent the least accumulation of urine, that the bladder may again retrieve its contractile power; whereas, in the former case, the patient is no sooner released from the spasm of the urethra, than all obstruction to the free passage is removed, and the bladder is then capable of evacuating its contents; for it has not lost the power of

contraction, as it does when affected by palsy, from the overstretching of its coats.

In these cases, the retention comes on in a less time than in those from paralysis, and before the bladder has had sufficient time to become much distended: it must therefore imply a previous morbid state of the canal, which could so predispose it to be acted on by this degree of stimulus. This morbid state consists in an irritability of that part.

Gonorrhœa contracted in youth, very frequently leaves behind it an irritable morbid state of the urethra, which, when aggravated by the circumstances already mentioned, as occurring particularly in old men, will occasion strictures to make their appearance, many years after the contraction of the disease, as happened in a case recorded in the Parisian Chirurgical Journal of Dessault, of a man aged fifty-two years, who had had a gonorrhœa twelve years before, who was for all that time afterwards, subject to habitual smartings, which were succeeded by real pain, and at length a disposition to contraction *took place in the urethra, &c.* Here then we find, that even the diseases of the urethra, contracted in youth, become a source of future disease in that canal, by the irritation they leave behind them. In the above case, this "morbid principle" existed to so great a degree, that the man *for all that time afterwards was subject to habitual smartings*, and sensible of its diseased state, until it manifested itself more decidedly by a contraction of that canal. But for the most part it leaves behind it a lesser degree of irritation, of which the

patient is no wise conscious. Even stricture may exist, and to a considerable degree, without the patient being aware of it.^g

“ This fact can only be accounted for, by reflecting on the slow and gradual manner in which, in cases of strictures the canal sometimes becomes lessened, and the stream of urine diminished, and by considering that the slight irritation which would from time to time, attach to such a state of urethra, as might easily be disguised under the excitements, which are daily experienced in the urinary passage, by those who indulge in the luxuries of the table.”^h

Strictures, mostly are found occurring in the membranous part of the urethra, denoting it to be naturally the most irritable portion of the canal; but a stricture in any other part, even if near the orifice of the urethra, or any other circumstance, preventing the uninterrupted flow of the urine, or emission of semen, will establish a degree of irritation, or morbid sensibility in the lower extremity of this canal; and most old men have some impediment to the free evacuation of their urine.

To those causes occurring in youth, of which we have already referred to one, affecting the urethra with “ *a latent irritation*, at an advanced period, may be added another, which, we may say more than any other concurs in establishing this morbid state of the urethra, which is that most horrible and unnatural vice, onanism; and

from the facility of gratifying their passions, they are unfortunately in the habit of repeating this act of self pollution so frequently, as to reduce themselves to the lowest degree of wretchedness.

If these persons should become of a studious disposition, and lead in consequence, a sedentary life, the evil is increased. They then become misogynists, and, “Le travail du cabinet rend les hommes delicats, affoiblit leur tempérament et l’âme garde difficilement sa vigueur quand le corps a perdu la sienne. L’étude use la machine, épuise les esprits, detruit les forces, énerve le courage, rend pusillanime, *incapable de résister également à la peine et aux passions.*”ⁱ They give way to them, and in consequence of the mechanical violence done the part, from severe manipulation, irritation is the more readily established in the urethra; and “when it is the result of preternatural muscular action, or of *excitement*, it is not confined to so distinct a point, neither is it so acutely sensible, but consists rather of a tenderness of the membrane, and particularly of that part of the canal which is within the Prostate Gland.”^k

The facility with which these persons gratify their passions, causes them to repeat it the more frequently, thus debilitating the canal, and more certainly establishing an irritable state of the urethra. Nay, the frequent repetition of this act, from the great violence offered those delicate parts, has been known to cause stricture.

ⁱ J. J. Rousseau pref. de Narcisse, œuvres divers Tom. I. p. 172.

^k Ramsden on Sclerocoele, p. 41.

“The causes tending to produce a derangement of the membrane of the urethra, are too numerous to admit of being distinctly specified; many of them are very remote, and others probably too minute or latent, to be discovered by surgical investigation. In general, it may be said that whatever occasions a frequency of muscular action upon the urethra, (*as onanism*) or a frequency of excitement within it, or whatever induces a temporary inflammation, (*as gonorrhœa*) may establish a state of irritation in its membrane¹. Thus constitutional irritability, (*which is present in advanced life,*) high living, excess in venery, indulgence in onanism, gonorrhœal inflammation, irritating injections (*particularly in the constitutional irritability already referred to,*) calculi in the bladder or kidneys, piles and other affections of the rectum,” &c. (*which occur for the most part in advanced life only,*) may, and does actually lay the foundation of an irritation, which will remain latent in the urethra, until, to it be added the general circumstances occurring in old age, such as piles, calculi, and those already pointed out as more particularly affecting the urinary organs in advanced life; it will then demonstrate itself by the affection of some remote part.

We have now endeavoured to show, by a chain of circumstances connected with a studious and sedentary life, how these tend to affect the urinary passage particularly; some of which we have shown to affect the urethra in a secondary and remote manner; but the

¹ Ramsden, on Sclerocele, p. 35—et sequent.

greater number of which have a direct operation in producing irritation in the membranous portion of the urethra; which irritation remains "latent" during the greater part of the life of the person, only becoming sensible, when, to it have been added the various circumstances connected with old age, and then manifesting itself by the disease it causes in some remote part.

It is to the presence of this "latent principle" in the urethra of most old and sedentary men, that we have ventured to ascribe the enlargement of the Prostate Gland, which occurs more particularly at this time, in those who have led that kind of life.

Except we admit this cause as existing in the urethra, or some other, which obtains in all old men, how will the fact that "it is a rare occurrence for a man to arrive at eighty years of age, without suffering *more or less* under disease of this part;"^m that is, of the Prostate gland, be accounted for?

Various causes have been assigned for the nature and production of this disease; but none I believe for its occurrence in old men particularly; but the same cause which occasions it in old men, may exist in those who are younger: it being prematurely produced in these last by some violence done to the parts.

It has been supposed subject to several morbid derangements; all of which have received different appellations: such are schirrus, scrofula, enlargement of its ducts,

^m Home Pract. Obs. on the treatment of the diseases of the Prostate Gland. p. 18.

through which the urine insinuates itself, enlarging and irritating the Gland, and frequently causing serious mischief: calculi in the ducts, "which are for the most part of a brown colour, differing in their composition from common urinary calculi."

These distinctions are well enough, serving as materials for the lengthening of a book; for most assuredly, the person who made them, could never have been able to distinguish them in practice, allowing them for a moment to be correct, that he might vary his *Modus Medendi*, either to give tone to the mouths of the ducts, to prevent their inhibiting the urine, or after they had done so, to counteract the acrimony of this fluid, that it should not irritate the body of the gland; nor did he I suspect ever find out any solvent for these wonderful calculi, which differ so entirely from the urinary, and which although so very small as to be scarcely perceptible, he was enabled to analyze so minutely.

The term scrofulous enlargement, it is probable, has been assigned because the diseased part happens to be a gland, and is continued in consequence of no persons troubling themselves to search for a better. This source of it has been mentioned by authors, in other parts of whose writings we are told that Scrofula does not affect the body, after the age of twenty-five or thirty years: yet they have prescribed recipe after recipe of calomel, and cicuta for the promotion of absorption in it. It is surprising that being the king's evil they had not employed the royal touch

to the part, or rubbed it with a dead man's hand, the older panacea for that complaint.

The term schirrus has been applied for the same reason ; the disease being an indurated gland. One author describes a *Schirrus* of the prostate in the following words : " it is often found of a cartilaginous texture ; but more frequently of the *appearance of hog's skin*, and appears filled with a kind of inspissated lymph.

" Sometimes it is increased to double, sometimes triple its natural size. Sometimes we find the whole gland affected with schirrus, and at others we find it only partially affected with this kind of induration.

" The hardness of the gland can sometimes be discovered by the introduction of the finger into the rectum, which is attended with little pain."^(m)

The definition given by writers of schirrus, is nearly as follows : a hard tumour, with craggedness of surface, with a red or livid appearance, attended with severe lancing pain, and derangement of general health.

M. Dessault's comparison of the hog's skin, does not much correspond with cragginess of surface ; and how he could so misname it, to call it schirrus, we confess ourselves a little surprised, when we read the last paragraph of his description, that " the hardness of the gland can be discovered by the introduction of the finger into the rectum, *which is attended with little pain.*"

The enlargement of the ducts of the Prostate Gland*

(^m) Dessault's Chirur. Journal, p. 186.

* Mr Weldon describing the method of introducing the Catheter in cases of enlarged Prostate, observes, that the end of it may be entangled in some of the en-

is occasioned by debility, which cannot exist without a concomitant irritability of that part of the urethra in which they terminate. The calculi which are found in the Prostate Gland, or rather in the extremities of its ducts, are not created from any disposition this part has to form stones, but they are produced similarly to those mentioned by Morgagni. Speaking of calculi formed behind the prepuce, he quotes the observation of Littre, on a boy, "who having a phymosis that prevented his urine "being properly discharged, this fluid for that reason "stagnated betwixt the Glans and the prepuce, none of "which were any more produced after the phymosis was "removed:" in like manner, the Prostate Gland being at first a little indurated and altered in size, forms an impediment, like the Phymosis in the case referred to, to the free passage of the urine, allows time for the deposit of calculous matter, which becomes an additional source of irritation to that, which had already caused the Gland to enlarge, and which now goes on increasing until a total obstruction is offered to the free passage of the urine. Again, "in some instances the affection of the Prostate Gland becomes the actual cause of the formation of calculus," (in the bladder.)

"The bladder never being completely emptied, the dregs of the urine, if I may be allowed the expression, being never evacuated, a calculus formed on a nucleus of

larged lacunæ, or in the excretory ducts of the Vesiculæ, which are generally enlarged. Obs. on Punct. the bladder. p. 168.

(n) Alexander's Morgagni Let. XL. art. 3.

the ammoniaco-magnesian phosphate and mucus is produced, when it would not have been produced under other circumstances.^o

As to the "*dregs*" never being evacuated, we can conceive, on the authority of Mr. Weldon, that some does pass off, and make its deposit upon the ducts of the prostate, who says^p "there is no disease *singly*, *except* *spasm*, can produce a retention of urine so permanent &c." as totally to obstruct the passage of it.

It thus happens that stones are found in the Prostate Gland. Instead of being formed by it, they are there deposited, and by the irritation they occasion, are the cause of the prostate enlarging.

There is another species of enlargement of this Gland, which has been noticed by M. Dessault, and which he has called *Varicose Enlargement of its Vessels*, and of those which ramify in the cellular substance which connects the neck of the bladder to the beginning of the urethra."

"From anatomy we learn, that these vessels form a plexus obvious to the eye. This vascular plexus is susceptible of considerable dilatation, and we may often remark a species of "*knobby projection* about the neck of the bladder, similar to *varices* situated in other different parts of the body."

These varicose vessels of the cellular substance of the prostate, he compares to hæmorrhoids, with which he says they are often complicated.

^o Home, Obs. treat. of Prost. Gland, p. 40.

^p P. 98.

He accounts for this varicose state, somewhat in the following manner; "violent contractions of the abdominal muscles, by strongly compressing the viscera contained in the abdominal cavity, will occasion a difficulty in the return of the blood by the iliac and mesenteric vessels, which will produce a distention of the veins in perineo, and necessarily occasion a swelling of the connecting parts."¹

This it may be said, at first view, accounts for the circumstance of an enlarged prostate being met with in old and sedentary men, who from the costive and debilitated state of their bowels, are obliged to make greater efforts with the "abdominal muscles," to evacuate their feces; and that it may arise independently of any irritation in the urethra. But, that it does not so, we will shew by M. Dessault's words in the same paragraph: "In this case, the varicose swelling of the prostate is *consecutive* to the retention of urine:" in which case we have already shewn irritation to be present.

All these various distinctions of the affection, to which it has been supposed the prostate gland is subject, we conceive to be no way different, neither as relates to the causes which were conceived to give rise to them, nor in the effects, as they shew themselves in the alteration of structure which the gland undergoes; and none of them partaking in any degree of the form of disease which has been ascribed to each. They are better classed under the

¹ Chirurg. Journal, p. 182.

one general denomination of *Sclerocele*, or hard tumour of the prostate gland, in conformity to Mr. Ramsden, who has applied it with so much perspicuity to the affection of the testicle, arising from the same cause: the difference of structure in the two parts occasioning the variety of appearance, which may be observed, when altered in their constitution by disease.

That the affection of the prostate resembles that of the testicles, is proved by the similarity of the descriptions given of the two diseases. Mr. Ramsden says, “in illustrating this opinion, it is to be remarked that when a testicle is affected by true schirrus, as it is termed, its morbid alteration will be found within its organic structure; but when the Gland becomes indurated and enlarged, in consequence of exterior causes of excitements, the morbid symptoms are, in the first instance, *entirely confined to the surrounding or intervening cellular substance.*”^r

M. Dessault, describing the induration to which the prostate is subjected, has the following: “In this disease, the body of the prostate is less enlarged than the *cellular substance which invests it*, the texture of which is sometimes soft and spongy, sometimes dense and hard, in proportion to the length of time the complaint has existed.”^s

In addition, we may add, the characteristic marks of the tumor. First, of the testicle; “as the induration advances,

^r Pref. Obs. on the Sclerocele, p. 13.

^s Chirurgical Journal.

it acquires a *peculiar callosity and craginess &c.*"[†] Des-sault speaking of the affection of the prostate, observes; — "we may often remark a species of *Knobby projection* about the neck of the bladder &c."

The similarity is still more remarkable in relation to the advance of the disease: "the morbid derangement is so subtle at its commencement, and its progress is so extremely gradual, that the disease seldom becomes the object of surgical investigation, until the patient's attention, is either attracted by the *inconvenient bulk* of the tumor, or some accidental circumstance occurs, and diverts it from its usual course."

"There is scarcely an instance of Sclerocele of the testicle, which does not corroborate this remark, by bearing incontestible evidences, of its *having existed long before the time*, at which the patient dates the discovery of his complaint."

The same is observed of the prostate, which may be enlarged for many years, without the patient being aware of his situation, and if he has led a temperate life, and avoids all violent exercise, he may never become conscious that he is any way disordered; but, if he has led a contrary course of life, even then he is only made sensible of the diseased state of this part, by the effect it produces, in preventing the free evacuation of the urine.

We have been shown most ably by Mr. Ramsden, in his valuable practical observations, how irritation applied to the termination of the vasa deferentia, will cause

[†] Ramsden *prac. obs.*

the testicles to enlarge, and to become indurated. From analogy we may determine, a similar cause applied to the extremities of the ducts of the prostate, will cause an enlargement and induration of this gland.

“ It appears to me more than probable, that the indurated liver of the spirit drinker, which is commonly called *scirrhus*, is an effect of continued and habitual irritation in the duodenum, at the extremity of the *ductus communis choledochus*, entering that intestine. There are no two parts of the human body which on first mention, would be supposed to bear less resemblance to each other, than the liver and the testicle ; yet, on investigation, it will be discovered, there exists a particular analogy between them. The liver has its excretory duct terminating in a channel (the duodenum) exposed to continual irritation from free living. When such irritation in the duodenum has been kept up, or continued to a great extent, this viscus becomes hardened and enlarged ; an effusion takes place into the cavity of the abdomen, and constitutes *ascites*. The testicle has its excretory duct also terminating in a channel (the urethra,) which is exposed in a variety of ways to irritation. When this irritation is established, or is continued, the gland becomes indurated and enlarged ;” &c.^u But how much greater is the analogy between the prostate gland and the testicles, than between these last and the liver : it has its ducts terminating in the same *channel*, (the urethra) where they are exposed to the same causes which establish irritation at the extremities

^u Ramsden note, p. 14.

of the ducts of the testicles, and it, in like manner, becomes *Sclerocele* or hard tumor, progresses in the same way, and puts on the same appearance as the testicles when they are affected from this cause.

That irritation once established in the urethra, can affect the prostate, we infer from the analogy existing between it and the testicle, which we know to be frequently so affected, the induration of which cannot be resolved, unless this channel be restored to its natural state, by the continued use, for a certain time, of the bougie. We know that from the long retention of urine in the bladder, the kidneys will be affected by inflammation and induration. "Independent of general causes, the kidneys are subject to be affected, by a *particular species of inflammation*, from diuretics, the internal exhibition or external application of cantharides, stones in the kidneys, long retention of the urine in the bladder &c."^v If irritation applied to the termination of the ureters in the bladder, can thus produce inflammation of the kidneys, I cannot conceive why we should not believe, that irritation applied to the extremities of the ducts of the Prostate Gland, should not cause an enlargement of it; for certainly in the latter case, the part is not so remote from the seat of the cause, as the kidneys are from the bladder: the apparent difference of the disease produced, is to be attributed to the very different structure of the parts concerned; the kidney being infinitely of more delicate organization than the substance

of the Prostate Gland, so that irritation applied to the extremities of its ducts (the ureters) causes an acute inflammation of it; but, the Prostate Gland being a part of much less delicate structure, is affected, from the same cause, acting, by a chronic inflammation of its substance, the difference of organization occasioning the variety which exists, in the appearance of the disease.

Again, calculi in the kidneys, will cause such irritation at the beginning of the urethra, as to induce a spasm and complete retention of urine, as is confirmed by Morgagni, in whose works we read: "in our man, therefore, to whom I now return, a calculus which was already generated (in the kidneys) might bring on both the pain of the loins and the suppression of urine, either by shutting up the upper part of the ureter or the *beginning of the urethra*(^w)."

That Calculi in the ureters, from the irritation they occasion, will cause the kidneys to enlarge, is proved by another observation from the same author. Speaking of an apoplexy he says; "to omit many other examples of an apoplexy itself, being brought on by suppression of urine, and particularly, that of Koenigius, in a senator, whose ureters were obstructed with calculi, and whose kidneys the right in particular, *were much enlarged beyond their natural size*(^x)."

The above examples of analogy might suffice to establish the possibility, that irritation at the extremities of

(^w) Alexander's Morgagni, Let. XL. art. 5.

(^x) Ibid.

the ducts of the prostate, will cause it to enlarge; but I cannot forego the mention of two facts, still more in point. A puncture in the end of the finger, will occasion the glands in the axilla to inflame, and to become enlarged; and a corn upon the toe, "is capable of inducing a flinty induration and enlargement of the inguinal glands, without in itself being sufficiently painful, to awaken the attention of the patient to the part, on which it is situated. In these cases, indeed, not only the source of irritation, but the affected Gland also, will be so entirely free from uneasiness, that the induration will often advance to a considerable size, before the patient becomes conscious of it(y):" moreover the reality, that frequently only one of the lobes of the Prostate Gland is enlarged, makes the analogy between it and the *Sclerocoele* of one testicle arising from irritation in the urethra, still stronger.

That the enlargement of the Prostate Gland is caused by irritation, is corroborated by a review of all the cases of this disease upon record; in which we will find that the patients have been universally affected by gonorrhœa, by stricture, by calculus or some one of those causes which we have shown to establish irritation in the urethra. In those cases recorded by Mr. Home, (than whom, perhaps no one has met with as many cases of this disease,) the introduction of an instrument was attended with difficulty, from the catheter reaching the diseased part, being grasped by a spasm of the urethra; which clearly proves great irritation to have existed in that part.

Having gone so far in attempting to establish that the same cause, (irritation) which produces the sclerocoele of the testicle, is the same which causes an enlargement of the Prostate Gland, it may not be mal-apropos to take a review of the treatment which has been employed by different surgeons, for the discussion of the swelling of this part, to see how far it goes to corroborate, from the similarity of it, to that instituted by Mr. Ramsden, in the treatment of the former, that the same cause which exists in the enlargement of the testicles, is present, in the induration of the prostate.

“ When the urine is completely retained, (in that form of the disease termed varicose enlargement) it is necessary to introduce a catheter. After the evacuation of the urine, by means of the catheter, it should be suffered to remain in the bladder. Its presence in the urethra becomes necessary to *dissipate the swelling of the prostate*, as well as of that portion of the urethra which passes through it.

“ A perfect cure cannot be expected in *less than six weeks or two months of this treatment*, and even then, the patient is subject to a relapse. To prevent this from taking place, the use of bougies should be relinquished by degrees, and they should be worn in the night even after the cure has apparently taken place.”²

In reading the above passage in M. Dessault's Chirurgical Journal, I thought the position advanced in this dissertation

² Dessault's Chirurg, Journal p. 185.

was not novel, but had for support the authority of that great surgeon. I was however disappointed, by his observation, that the bougie removed the enlargement of the prostate gland by its pressure ; making a comparison between it and the varicose enlargement which takes place in the veins of the leg, in which case we know pressure to be successful. But I ask for it to be so, if it is not necessary that it should be equable, and universal to produce any good effect. Is not universal and regular pressure, as necessary to cure varicose enlargements in one part, as in another ? And would not the partial pressure of a bougie in the urethra, acting on one side only, have rather a tendency to aggravate, than to resolve this morbid state of vessel ? Yet we cannot pretend to deny that M. Dessault has performed the cures he relates ; it is more reasonable, however, to suppose that he has only mistaken the cause of the enlargement ; and the success which attended the “ treatment by the urethra,” is of the most convincing kind.

He admits, however, the success from the use of the bougie in these cases, is not to be attributed “ wholly to compression.” He says, “ their residence in the canal induces a kind of phlogosis in this part and in the prostate, which assist the subsidence of this swelling.”^f In another part of his Journal, he adds, (speaking of the affection which he calls schirrus) it is a disease to which *old men*, and those who have had *frequent gonorrhœas*, are particularly liable. Notwithstanding it be schirrus, he cures it after the same method, as he does the former affection ; but

^f F. Dessault

how it acts in this case he has not clearly told us. It will not do to suppose that it acts by pressure in removing a schirrus! that I think would rather aggravate it. He seems however to entertain a fanciful idea of the enlargement of the prostate being discussed, by virtue of the increased discharge which the bougie caused; for his words are "the use of the bougies should not be relinquished *till the discharge* occasioned by their presence is stopped, and the prostate reduced to its natural size, which generally does not take place till the thirtieth or fortieth day after the treatment, and sometimes not till a later period." A most complacent schirrus this, that it should subside with the same treatment and in less time, than common varicose state of the vessels! for in the latter case he allows six weeks for its discussion.

How the bougie acts is pretty evident, and sufficiently evinces the disease to be not a schirrus affection of the part, for doubtless, in this case, it would hasten its progress to ulceration.

Mr. Home makes use of a similar treatment, but he only continues it until the patient is enabled to evacuate his urine, and not till the disease is removed. He also in some instances attempted to excite a discharge from the urethra, but by more violent means; as the smearing the bougie with some stimulating ointment, yet he could not succeed, it only caused a violent degree of inflammation without any discharge following. In some of his cases the patient continued the use of the catheter, and had the

swelling of their prostate removed, some in two, others in four weeks after the first introduction.

But as the patient is seldom or ever conscious of his situation, until the prostate has so enlarged that it completely shuts up the orifice of the urethra, the use of the bougie, or catheter may be objected to from a supposition of the impossibility to pass them.

Mr. Weldon, in attempting to introduce the catheter, persisted in his endeavours for near one hour and a half, and ultimately succeeded in getting it into the bladder: which circumstance encourages us to continue our efforts as long as there is no apparent danger of inflammation of the bladder coming on, from its over distention: he found the same difficulty in passing it for the five days following; but after this time, the impediment gradually ceasing, he was enabled to introduce it, with comparative facility.

From these circumstances I conclude, that the introduction of the catheter, lessening the irritability of the urethra, removed the cause of the disease, and the enlargement of the prostate gradually decreased, for we find that he could not introduce it with any more ease than he did at the first trial, until he had succeeded in passing it ten times; that is, after the fifth day, having introduced it every twelve hours. As the difficulty to introduction at first was the increased size of the Prostate Gland, nothing but its subsidence in some degree, could in any manner modify this obstruction to the passage of the instrument, which at first had made him persist for an hour and a half, before he succeeded in introducing it. In another

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case, he was compelled to continue the use of the catheter three weeks, before the enlargement of this Gland would permit the patient to pass his urine; after which time all impediment ceased.

From both these cases, I am persuaded, that, had he continued the use of the catheter or bougie, he would have been as successful as M. Dessault, in removing this *Sclerocele*, or hard tumour of the Prostate Gland.

The length of time after the first introduction of the bougie, to the first sign of diminution in the size of the Prostate Gland, being from two to six weeks, makes the analogy between the affection of this Gland, and the testicles, still stronger: for in all the cases of the latter, recorded by M. Ramsden, not one of them lasted more than six weeks after the first introduction of the bougie, and in very few of these cases, was it necessary to employ any local application to the part.

Whether the same success would attend the treatment of the prostate, it being a part possessed of less powers of restoration than the testicles, we cannot positively determine; yet it is certain from the authors already referred to, that cases of it have thus been cured; that we can succeed in removing the cause of it, and if in so doing, we can cause it to subside in some degree, so as materially to relieve the patient, it is a great point gained.*

* I was informed by Dr. Clusman, of Brooklyn, that he had had several patients affected with an enlargement of the prostate gland, in whom he employed M. Dessault's plan of treatment by the bougie, but that he had never been able to ascertain its perfect success, for the patients finding themselves relieved, disappeared, taking the bougie with them, until last year he had another case, in

The bougie, or catheter to be employed in those cases, must be longer than those in common use. Upon this point all are agreed; but as to the alteration which takes place in that part of the urethra, which makes it necessary to adopt a different instrument from that generally used, we have different opinions.

M. Dessault recommends a catheter two inches longer than that which is usually employed, although we do not know his reason for so doing. He says, "we must conceive that the swelling of this gland can scarce take place, without in some degree *contracting that part of the urethra* which it embraces."^a

Mr. Weldon makes use of a similar catheter, but his reason for so doing is more apparent than the former; his remarks are, "it has already been observed that in this disease, that portion of the urethra situated within the Prostate Gland becomes much *longer*, more curved, and at the same time wider, than in its natural state. It has likewise been observed that, when a retention of urine takes place in this disease, it is necessary therefore, that the catheter used in these cases, be one inch and a half, or two inches *longer* than in other cases: at the same time its curvature ought to be increased in proportion to the increased curvature of the urethra, especially towards the point."

the person of Capt. M. living in the house with him, in which he completely succeeded in removing all the diseases of this part.

I asked him his opinion concerning the cause of this disease, he answered he was enable to form any satisfactory one.

^a Chirurgical Journal, p. 71.

Mr. Home coincides with Mr. Weldon as to the state of the urethra: his observation, speaking of a particular case, is, "the space between the tumor in the bladder and the bulb of the urethra, was unusually short, which is the reverse of what is commonly met with, &c."^b and of course more curved than natural: the lobes then falling together, offer a complete obstruction to the passage of the urine. Mr. Home contends, however, that it is the enlargement of a particular lobe of this gland (which he believes to have himself discovered) only, which can form a sufficient obstruction to make the disease of any importance.

He endeavoured to find this third lobe in the natural state of the parts. The gentleman employed in dissecting for him reported, t'at, "in doing this, a small rounded substance was discovered, so much detached, t'at it seemed a distinct gland, and so nearly resembling Cowper's glands in size and shape, as they appeared in the same subject, in which they were unusually large, that it appeared to be a gland of that kind. It could not however be *satisfactorily separated from the Prostate Gland*; nor could any distinct duct be found leading into the bladder."

From the circumstances of its not being satisfactorily separated from the Prostate Gland, it is doubtful whether it be a part which may be met with in every subject. Moreover, if it were really a third lobe, why is it not provided with excretory ducts like the others? But it is as other preternatural parts of a gland, which are, not unfre-

^b Home, *Prac. Obs. on the treatment of the Pros. Gland.* p. 7.

quently known to have ducts terminating in blind extremities: if it were a distinct lobe it would be equally liable to increase, and in the same progression, from the same causes as the other two, and this disease would terminate fatally in a much less time than it usually does. Besides, Mr. Home adds "a similar examination was made of t^his part in five different subjects. The appearance was not exactly the same in any two of them. In one there was no apparent glandular substance, but a mass of condensed cellular membrane: this, however, on being cut into, differed from the surrounding fat. In anot^her there was a lobe blended laterly with the sides of the Prostate Gland,"^c which leads me to conclude that if it be actually a lobe, it is a *lusus nature* or that it is like other glandular bodies, sometimes lobulated or fissured, as obtains not unfrequently in the spleen. But Morgagni entertains a similar opinion, for he has described a third lobe as distinctly as Mr. Home, although the latter is unwilling to allow him the credit of it. In a quotation he makes from him, he thinks his claim to discovery is firmly established, he says, "it is evident that Morgagni had no idea that there was any conformation of the Prostate Gland, that could account for this tumor, and believed that it arose from the body of the gland." How much Morgagni believed as Mr. Home is willing to make him appear to do, we may see from the very next passage. Referring to a case he had formerly mentioned, he observes, "in the meanwhile you

may add, to these other examples, that old Physician, whom one of the observations referred to, in Vallesneri, shows to have had the whole Prostate Gland tumid, but increased with a *particular lobe*, as it were from its glandular substance, (thereby meaning the body of the gland) which rose up within the bladder in the shape and size of a walnut." Mr. Home also says, that in tracing this third lobe, it was lost in the substance of the Gland. And further, Morgagni in his observation of another case: "when the anterior paries of the bladder was cut asunder longitudinally, in that part of the opposite paries which is nearest to the orifice, and in the very middle of this part, a roundish protuberance appeared, being of the bigness of a small grape, covered over with the internal coat of the bladder.

"What this protuberance was I readily supposed; and by forcing the knife into it, I cut through this and the contiguous Prostate Gland, at the same time, lengthwise, and shewed that it was of the *same nature with that gland*: that it was very evidently continued from it; and that there was no doubt but if it had grown out to a greater degree, it must have been a very considerable impediment to the discharge of urine."^d Again, he met with an instance in which there was a third lobe, on the posterior side, towards the rectum, which fact proves it to be of accidental occurrence.

But, as before observed, Mr. Home thinks that unless this middle lobe be enlarged, no serious symptoms can su-

^d Alexander's Morgagni.

pervene. This observation is certainly not correct; for the enlargement of the lateral lobe will cause as complete retention, as can possibly be occasioned by the enlargement of the middle one: and there is a specimen preserved, in the Anatomical Museum of this college, in which nothing but a regular enlargement of that substance which we commonly call the prostate, without the least additamentum of the middle lobe, or any thing else projecting into the bladder, which can in any way be compared to the "nipple like process" spoken of, is to be seen; but there is a regular projection of the whole gland into it, which raises its coats so as effectually to form the "membranous bridle," mentioned by Mr. Home, which in the attempts to evacuate the urine, must have been pressed by this fluid against the orifice of the urethra, so as completely to close it, which occasioned the death of the patient as readily as if the gland had had an addition of a dozen lobes.

Morgagni also says, "the whole Prostate Gland is not always tumid; for frequently only the superior circumference of it either grows out on every side, or on a particular part, and swells to such a degree as to prevent the exclusion of the urine;" * which gives us to understand that a complete retention may take place from the swelling of the other parts of the gland, and that this enlargement of the superior part of its circumference (which is called the middle lobe) occurs sometimes only.

* Alexander's Morgagni, chap. XLI.

I do not pretend to deny the existence of a third lobe, but that it is not this only which is of importance. I think Mr. Home has acted in conformity to what he has advanced, that "it is much easier to take up some few instances of an *uncommon kind*, and shape our practice to these particular cases." That he has in some instances mistaken the projection of the upper posterior edge of the Prostate Gland into the bladder, for a middle lobe, and which has caused him to say "as it is this particular lobe, which in its enlargement closes up the entrance of the bladder, I have directed my observations to that particular part, at the same time I have not passed over the enlargement of the other portions of this Gland, nor been unmindful of its effects in keeping up irritation, and interfering with the passing of instruments into the bladder. These are circumstances of considerable importance, but are not direct symptoms of the disease, which produces an impediment to the passage of the urine. *Those entirely arise from the enlargement of the middle lobe^(f).*" But unfortunately for Mr. Home, he appears to have forgotten himself, for in describing the state of parts as represented in his tenth plate, he says, "the mere inspection of these parts is sufficient to show that no urine could have been voided by the spontaneous efforts of the patient^(g). It must be observed, that in this case only one of the lobes of this gland was enlarged, and this was the left lateral lobe.

This projection of the middle lobe into the bladder, is

(f) Home, treatment of the diseases of the Prost. Gland, p. 16.

(g) Ibid. p. 268.

said sometimes to be attacked by ulceration, from the surface of which a fungus arises: but this however is of rare occurrence.

Of an affection similar to this, that is, of a fungus excrescence arising from the *ulcerated surface of the middle lobe of the Prostate Gland*, Mr. Home supposes Doctor Fothergill to have died: but in his case the fungus was situated much above the Prostate Gland, which as related by Dr. Lettsom was not sufficiently enlarged in any way to project into the bladder. Dr. Fothergill was subject to calculous affections, as was proved upon dissection. These calculi will cause ulceration at the neck of the bladder; and “when the neck of the bladder is become ulcerated, a fungus may form from the diseased surface, and cause a retention of urine.”^(g) Such I conceive the case of Dr Fothergill to have been; the occasional inflammation of the fungus rendering the neck of the bladder and the urethra irritable, and thus establishing the cause for the enlargement of the prostate gland to take place, which was only of secondary consideration, for it had not yet attained a sufficient bulk either to prevent the free exit of the urine or to offer any impediment to the introduction of the catheter; both of which circumstances when they did occur, were caused by the fungus excrescence, which arose apparently “from the internal coat of that part of the bladder which was *next to its neck*.”^(h) that the prostate was of secondary consideration, and no way

(g) Weldon, Obs. on Punct. the Bladder p. 120

(h) Lettsom's account of the case.

concerned in the production of the disease, we infer from the observation of the narrator. "The Prostate Gland was enlarged, and by no means in a natural state." Certainly so accurate an observer as Dr. Lettsom, would have been able to tell, whether this fungus did, or did not arise from the ulcerated surface of one of the lobes of the Prostate Gland.

There are many such examples mentioned by Morgagni, who quotes a case from Rhodius, of an old man "in whom the discharge of his urine had been rendered very difficult by degrees: and finally, mucus being added was entirely obstructed by a *callous appendage growing internally to the orifice of the bladder alone*" &c.: and the following quotation may be said to be an accurate description of that which occurred in Doctor Fothergill: "from the posterior part of the orifice, (of the bladder) a body the size of a small cherry was prominent within it, and the more this descended through the beginning of the subjected urethra, the more and more was it extenuated, so that it did not reach to the seminal caruncle."ⁱ This last, however, is much smaller than that which was found in Doctor Fothergill's bladder, which was of a "pyriform shape, hard, rough, unequal, on its surface, of a pale red colour," the fundus of which was much higher than the prostate gland, and its neck was extenuated, as in the last case, down near to the verumontanum, or as it is called the "seminal caruncle."

ⁱ Alexander's Morgagni.

This dissertation having already swelled to an unintentional length, precludes the possibility of noticing any of the other diseases, to which the Prostate Gland is occasionally subjected, such as inflammation ending in suppuration &c. I must therefore conclude with some observations on the treatment, which may tend to the alleviation of the affection of the Prostate Gland, disagreeable in itself, and dangerous in its consequences, which has commonly been called a schirrous enlargement, but which we have chosen to call *Sclerocele*, or hard tumor of this gland, as better characterizing it.

It will be in few words; having already anticipated the principal part of it, namely, the treatment “by the urethra” with the bougie, together with a seton worn in perineo, which last of itself, we are assured^k has caused a considerable reduction of the tumor of this gland, greatly to the relief of the patient.

^k MS. notes of Professor Mott's lectures.

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